

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

Access DB# 7/252

SEARCH REQUEST FORM

Scientific and Technical Information Center

BEST AVAILABLE COPY

Requester's Full Name: _____ Examiner #: 65941 Date: 7/18/03
Art Unit: 1627 Phone Number 30 8-3967 Serial Number: 09/276,783
Mail Box and Bldg/Room Location: 2B17 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: R

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

BEST AVAILABLE COPY

STAFF USE ONLY

Type of Search Vendors and cost where applicable
Searcher: _____ NA Sequence (#) _____ STN _____
Searcher Phone #: _____ AA Sequence (#) _____ Dialog _____
Searcher Location: _____ Structure (#) _____ Questel/Orbit _____
Date Searcher Picked Up: _____ Bibliographic _____ Dr.Link _____
Date Completed: _____ Litigation _____ Lexis/Nexis _____
Searcher Prep & Review Time: _____ Fulltext _____ Sequence Systems _____
Clerical Prep Time: _____ Patent Family _____ WWW/Internet _____
Online Time: _____ Other _____ Other (specify) _____

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 16:37:05 ON 23 JUL 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 23 Jul 2002 VOL 137 ISS 4
FILE LAST UPDATED: 22 Jul 2002 (20020722/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

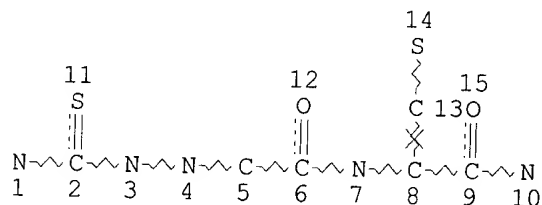
CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=>

=>

=> d stat que 14

L1 STR



NODE ATTRIBUTES:

NSPEC IS RC AT 8

NSPEC IS RC AT 13

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L3 27 SEA FILE=REGISTRY SSS FUL L1

L4 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

=>

=>

=> d ibib abs hitrn 14 1-6

L4 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2002:51893 HCAPLUS
 DOCUMENT NUMBER: 136:123598
 TITLE: Production and use of novel peptide-based agents for
 use with bi-specific antibodies
 INVENTOR(S): Hansen, Hans J.; Griffiths, Gary L.; Leung, Shui-on;
 McBride, William J.; Qu, Zhengxing
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 37 pp., Cont.-in-part of U. S.
 Ser. No. 337,756.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 14
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002006379	A1	20020117	US 2001-823746	20010403
PRIORITY APPLN. INFO.:				
			US 1998-90142P	P 19980622
			US 1998-104156P	P 19981014
			US 1999-337756	A2 19990622

AB The present invention relates to a bi-specific antibody or antibody
 fragment having at least one arm that is reactive against a targeted
 tissue and at least one other arm that is reactive against a linker
 moiety. The linker moiety encompasses a hapten to which antibodies have
 been prepd. The antigenic linker is conjugated to one or more therapeutic
 or diagnostic agents or enzymes. The invention provides constructs and
 methods for producing the bispecific antibodies or antibody fragments, as
 well as methods for using them.

IT **391267-29-1P**, IMP 243
 RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic
 use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (peptide-based diagnostic and therapeutic agents for use with
 bi-specific antibodies)

L4 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2000:769945 HCAPLUS
 DOCUMENT NUMBER: 134:82801
 TITLE: Experimental Pretargeting Studies of Cancer with a
 Humanized anti-CEA .mu.e Murine anti-[In-DTPA]
 Bispecific Antibody Construct and a
 99mTc-/188Re-Labeled Peptide
 AUTHOR(S): Karacay, H.; McBride, W. J.; Griffiths, G. L.;
 Sharkey, R. M.; Barbet, J.; Hansen, H. J.; Goldenberg,
 D. M.
 CORPORATE SOURCE: Immunomedics Inc., Morris Plains, NJ, USA
 SOURCE: Bioconjugate Chemistry (2000), 11(6), 842-854
 CODEN: BCCHEs; ISSN: 1043-1802
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The aim of this study was to localize 99mTc and 188Re radionuclides to
 tumors, using a bispecific antibody (bsMAB) in a two-step approach where
 the radionuclides are attached to novel peptides incorporating moieties
 recognized by one arm of the bsMAB. A chem. cross-linked human/murine

bsMAb, hMN-14 .times. 734 (Fab' .times. Fab'), anti-carcinoembryonic antigen [CEA] .times. anti-indium-DTPA was prepd. as a prelude to constructing a fully humanized bsMAb for future clin. application. N,N'-o-Phenylenedimaleimide was used to cross-link the Fab' fragments of the two antibodies at their hinge regions. This construct was shown to be >92% pure and fully reactive with CEA and a divalent (indium)DTPA-peptide. For pretargeting purposes, a peptide, IMP-192 [Ac-Lys(In-DTPA)-Tyr-Lys(In-DTPA)-Lys(TscG-Cys-)-NH2 {TscG = 3-thiosemicarbazonylglyoxyl}], with two indium-DTPAs and a chelate for selectively binding ^{99m}Tc or ¹⁸⁸Re, was synthesized. IMP-192 was formulated in a "single dose" kit and later radiolabeled with ^{99m}Tc (94-99%) at up to 1836 Ci/mmol and with ¹⁸⁸Re (97%) at 459-945 Ci/mmol of peptide. [^{99m}Tc]IMP-192 was shown to be stable by extensive in vitro and in vivo testing and had no specific uptake in the tumor with minimal renal uptake. The biodistribution of the hMN-14 .times. murine 734 bsMAb was compared alone and in a pretargeting setting to a fully murine anti-CEA (F6) .times. 734 bsMAb that was reported previously. Both bsMAbs maintained their integrity and dual binding specificity in vivo, but the hMN-14 .times. m734 was cleared more rapidly from the blood. This coincided with an increased uptake of the hMN-14 .times. m734 bsMAb in the liver and spleen, suggesting an active reticuloendothelial cell recognition mechanism of this mixed species construct in naive mice. Animals bearing GW-39 human colonic cancer xenografts were injected with bsMAb (15 .mu.g) and after allowing 24 or 72 h for the bsMAb constructs to clear from the blood (hMN-14 and murine F6 .times. 734, resp.), [¹⁸⁸Re]IMP-192 (7 .mu.Ci) or [^{99m}Tc]IMP-192 (10 .mu.Ci) was injected at a bsMAb:peptide ratio of 10:1. Tumor uptake of [^{99m}Tc] or [¹⁸⁸Re]IMP-192 was 12.6 +/- 5.2 and 16.9 +/- 5.5% ID/g at 3 h postinjection, resp. Tumor/nontumor ratios were between 5.6 and 23 to 1 for every major organ, indicating that early imaging with ^{99m}Tc will be possible. Radiation absorbed doses showed a 4.8-, 7.2-, and a 12.6 to 1.0 tumor to blood, kidney, and liver ratios when ¹⁸⁸Re was used. Although this new bsMAb pretargeting approach requires further optimization, it already shows very promising targeting results for both radioimmunodetection and radioimmunotherapy of colorectal cancer.

IT 318295-35-1DP, IMP 192, rhenium and technetium complexes
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (cancer targeting with anti-CEA [In-DTPA] bispecific antibody and ^{99m}Tc-/¹⁸⁸Re-labeled peptide)

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:260078 HCAPLUS

DOCUMENT NUMBER: 132:284257

TITLE: Site-specific labeling of disulfide-containing targeting vectors

INVENTOR(S): McBride, William J.; Griffiths, Gary L.

PATENT ASSIGNEE(S): Immunomedics, Inc., USA

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

WO 2000021573 A1 20000420 WO 1999-US23614 19991013
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 9964244 A1 20000501 AU 1999-64244 19991013
 EP 1121153 A1 20010808 EP 1999-951901 19991013
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1998-103904P A2 19981013
 WO 1999-US23614 W 19991013

AB A method of producing a diagnostic or therapeutic conjugate of a protein, polypeptide or peptide contg. at least one disulfide bond which is necessary to maintain its biol. activity, and bearing at least one thiol-contg. moiety linked thereto through a hydrazone or hydrazine linkage, is effected by contacting said protein, polypeptide or peptide with a thiol-reactive diagnostic or therapeutic agent, either preformed or generated in situ, to form a stable diagnostic or therapeutic conjugate of the protein, polypeptide or peptide without substantial cleavage of the disulfide bond. Diagnostic and therapeutic conjugates produced using the foregoing method, as well as kits for carrying out the method are provided. A peptide IMP 155 was conjugated to periodate oxidized LL2 F(ab')₂ fragment and this conjugate was labeled using Na^{99m}TcO₄.
 IT **224446-85-9DP**, conjugates with oxidized Fab fragment, complex with ^{99m}Tc **264146-50-1DP**, IMP 171, conjugates with oxidized Fab fragment, complex with Re-188 **264146-51-2DP**, IMP 162, conjugates with oxidized Fab fragment, complex with ^{99m}Tc
 RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
 (site-specific labeling of disulfide-contg. targeting vectors)
 IT **224446-85-9P**, IMP 155
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (site-specific labeling of disulfide-contg. targeting vectors)
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1999:325973 HCAPLUS
 DOCUMENT NUMBER: 130:336967
 TITLE: Glycosylated antibodies and antibody fragments having reactive ketone groups
 INVENTOR(S): Leung, Shui-On; McBride, William J.; Qu, Zhengxing; Hansen, Hans
 PATENT ASSIGNEE(S): Immunomedics, Inc., USA
 SOURCE: PCT Int. Appl., 32 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9924472	A2	19990520	WO 1998-US23238	19981106
WO 9924472	A3	19990805		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2309320	AA	19990520	CA 1998-2309320	19981106
AU 9913729	A1	19990531	AU 1999-13729	19981106
EP 1028978	A2	20000823	EP 1998-957482	19981106
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

JP 2001522864 T2 20011120 JP 2000-520480 19981106
 PRIORITY APPLN. INFO.: US 1997-64386P P 19971106
 WO 1998-US23238 W 19981106

AB The authors disclose methods of making glycosylated antibodies or antibody fragments having reactive ketone groups within the saccharide residues. The method comprises transfecting a cell with a vector encoding an antibody having glycosylation sites engineered within the V.kappa. or CH1 domains. Culture of the transfecting cells in medium contg. a ketone deriv. of a saccharide (e.g., N-levulinoyl fucose) or saccharide precursor (e.g., N-levulinoyl mannosamine) allows for biosynthetic incorporation of the reactive ketone saccharides within the engineered oligosaccharides. In addn., the authors disclose immunoconjugates prepd. from the glycosylated antibodies. In one example, the oligosaccharide of engineered ant-CD22 antibodies was conjugated to DTPA derivs. to prep. ¹¹¹In and ⁹⁰Y chelates. In a second example, the oligosaccharide of engineered ant-CD22 antibodies was conjugated to doxorubicin.

IT **224446-81-5 224446-83-7 224446-85-9**
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (modification of glycosylated antibodies contg. saccharide residues with ketone functional group by)

L4 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:66117 HCAPLUS
DOCUMENT NUMBER: 128:154385
TITLE: Preparation of radiometal-binding peptide analogs
INVENTOR(S): McBride, William J.; Griffiths, Gary L.
PATENT ASSIGNEE(S): Immunomedics, Inc., USA; McBride, William J.;
Griffiths, Gary L.
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9802192	A1	19980122	WO 1997-US12084	19970711
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,			

UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
 GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
 GN, ML, MR, NE, SN, TD, TG

CA 2259950 AA 19980122 CA 1997-2259950 19970711

AU 9737249 A1 19980209 AU 1997-37249 19970711

AU 725827 B2 20001019

EP 975374 A1 20000202 EP 1997-934115 19970711

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI

US 6126916 A 20001003 US 1997-893749 19970711

JP 2000515514 T2 20001121 JP 1998-506171 19970711

PRIORITY APPLN. INFO.: US 1996-21662P P 19960712

WO 1997-US12084 W 19970711

OTHER SOURCE(S): MARPAT 128:154385

AB Radiometal-binding peptide analogs R1R2NC(S)NR3NR4CR5R6CONHCR7(CR8R9SH)CON
 R10-peptide were prepd. Such peptide derivs. are readily labeled with
 radiometals, such as isotopes of rhenium or technetium, while retaining
 their ability to tightly bind specific peptide receptors. Thus, cyclic
 .alpha.-MSH analog MaGC.gamma.-AbuNleDHFdRWK-NH2 (Ma = mercaptoacetyl,
 subscript d indicates D isomer, the DHFRWK sequence is cyclized as a
 lactam through the aspartic acid and lysine side chains) was prepd. by the
 solid-phase method.

IT 186350-70-9P 202526-64-5P 202526-66-7P

202526-67-8P 202526-68-9P 202526-69-0P

202526-70-3P 202526-71-4P 202526-73-6P

202526-74-7P 202526-75-8P 202526-76-9P

202526-77-0P 202526-78-1P 202526-79-2P

202526-80-5P 202526-81-6P 202526-84-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
 study); PREP (Preparation); USES (Uses)

(prepn. of radiometal-binding peptide analogs)

L4 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:119199 HCAPLUS

DOCUMENT NUMBER: 126:131780

TITLE: Preparation of radiometal-binding analogs of
 luteinizing hormone releasing hormone

INVENTOR(S): Mcbride, William J.; Karacay, Habibe; Griffiths, Gary
 L.

PATENT ASSIGNEE(S): Immunomedics, Inc., USA

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640756	A1	19961219	WO 1996-US8695	19960607
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN			
US 5753206	A	19980519	US 1995-474555	19950607
CA 2223432	AA	19961219	CA 1996-2223432	19960607

AU 9661501 A1 19961230 AU 1996-61501 19960607
 AU 712968 B2 19991118
 EP 836618 A1 19980422 EP 1996-919063 19960607
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI
 JP 11513977 T2 19991130 JP 1996-501203 19960607
 US 37710 E 20020521 US 2000-572339 20000518
 PRIORITY APPLN. INFO.: US 1995-474555 A 19950607
 WO 1996-US8695 W 19960607

OTHER SOURCE(S): MARPAT 126:131780

AB Peptide derivs. of LH-RH that are capable of binding radionuclides are provided. The peptide derivs. are readily labeled with isotopes of rhenium or technetium, while retaining their ability to tightly bind LH-RH receptors. Methods for prepg. the labeled peptides and their use in methods of radiodiagnosis and radiotherapy are described. Thus, pGlu-His-Trp-Ser-Tyr-Lys(HSCH2CO-Gly-Cys)-Leu-Arg-Pro-Gly-NH2 was prepd. by std. solid-phase methods using 9-fluorenylmethoxycarbonyl (Fmoc) chem. and radiolabeled with Na99mTcO4 or Na188ReO4. Prepd. radiolabeled LH-RH analogs were tested for receptor binding in vitro and also evaluated for biodistribution in mice.

IT **186350-66-3P 186350-70-9P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (prepn. of LH-RH radiometal-binding analogs and their use in radiodiagnosis and radiotherapy)

IT **186350-66-3DP, technetium-99m conjugates 186350-70-9DP,**
 technetium-99m conjugates

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of LH-RH radiometal-binding analogs and their use in radiodiagnosis and radiotherapy)

IT **186350-76-5P**

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of LH-RH radiometal-binding analogs and their use in radiodiagnosis and radiotherapy)

=> fil caold

FILE 'CAOLD' ENTERED AT 16:37:48 ON 23 JUL 2002
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=>

=>

=> s 13

L5 0 L3

=>

=>

=> fil reg

FILE 'REGISTRY' ENTERED AT 16:38:03 ON 23 JUL 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 22 JUL 2002 HIGHEST RN 439790-45-1
DICTIONARY FILE UPDATES: 22 JUL 2002 HIGHEST RN 439790-45-1

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

=>

=> d ide can 13 1-27

L3 ANSWER 1 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN 391267-29-1 REGISTRY
CN L-Lysinamide, N2-acetyl-N6-[N-[4-[[2-(1H-imidazol-4-yl)ethyl]amino]-1,4-
dioxobutyl]glycyl]-L-lysyl-D-tyrosyl-N6-[N-[4-[[2-(1H-imidazol-4-
yl)ethyl]amino]-1,4-dioxobutyl]glycyl]-L-lysyl-N6-[N-
[[aminothioxomethyl]hydrazono]acetyl]-L-cysteiny]- (9CI) (CA INDEX
NAME)

OTHER NAMES:

CN IMP 243

FS PROTEIN SEQUENCE; STEREOSEARCH

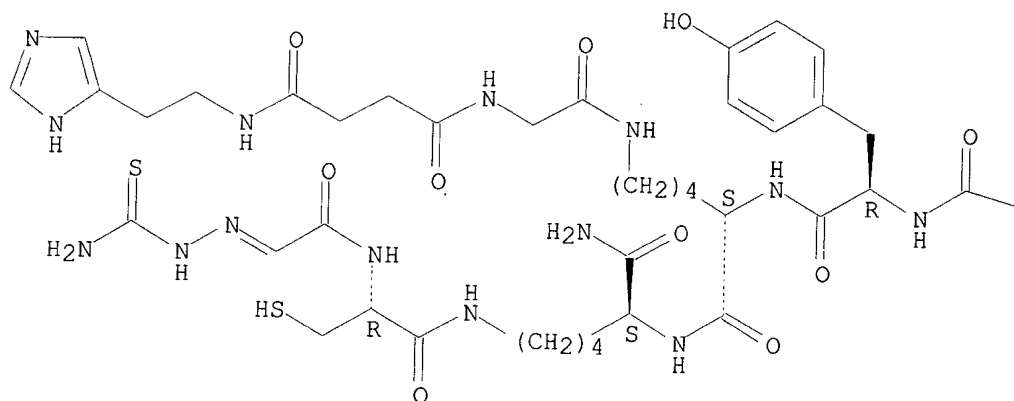
MF C57 H86 N20 O14 S2

SR CA

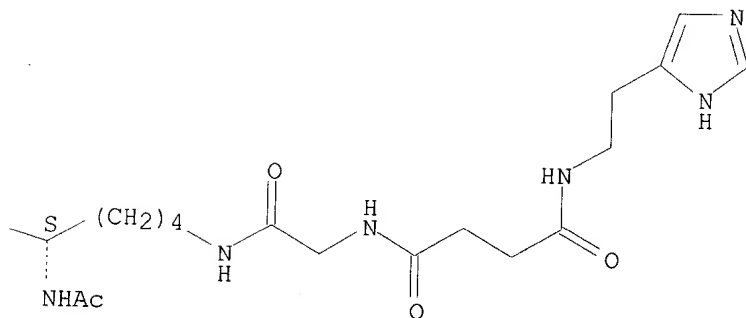
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

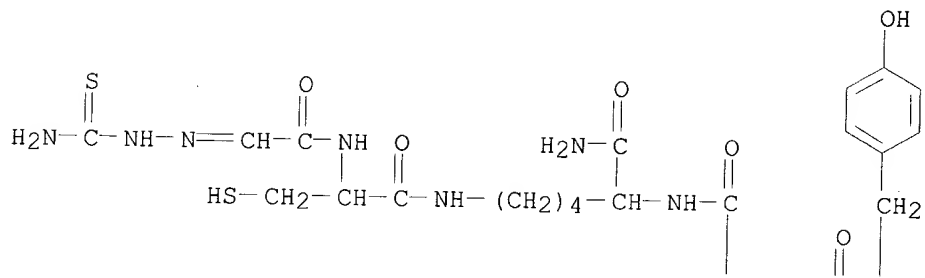
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:123598

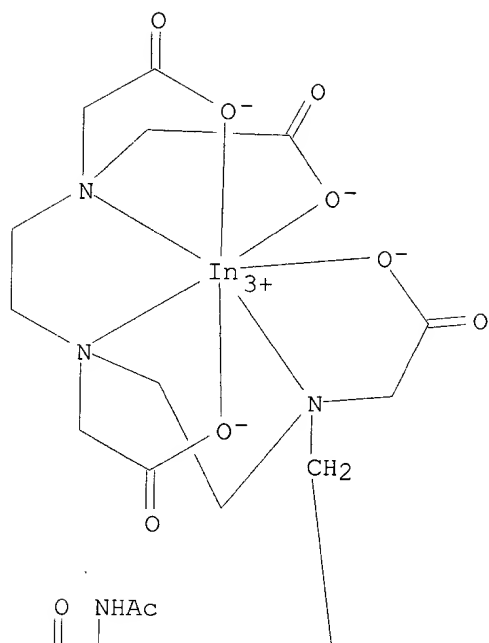
L3 ANSWER 2 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN 318295-35-1 REGISTRY
CN Indate(2-), [.mu.-[N2-acetyl-N6-[N-[2-[[2-[bis[(carboxy-.kappa.O)methyl]amino-.kappa.N]ethyl][(carboxy-.kappa.O)methyl]amino-.kappa.N]ethyl]-N-[(carboxy-.kappa.O)methyl]glycyl]-L-lysyl-L-tyrosyl-N6-[N-[2-[[2-[bis[(carboxy-.kappa.O)methyl]amino-.kappa.N]ethyl][(carboxy-.kappa.O)methyl]amino-.kappa.N]ethyl]-N-[(carboxy-.kappa.O)methyl]glycyl]-L-lysyl-N6-[N-[(aminothioxomethyl)hydrazono]acetyl]-L-cysteiny]-L-lysylamidato(8-)]]]di-, dihydrogen (9CI) (CA INDEX NAME)
OTHER NAMES:
CN IMP 192
FS PROTEIN SEQUENCE

```
MF      C63 H92 In2 N18 O26 S2 . 2 H
CI      CCS
SR      CA
LC      STN Files:  CA, CAPLUS, TOXCENTER
```

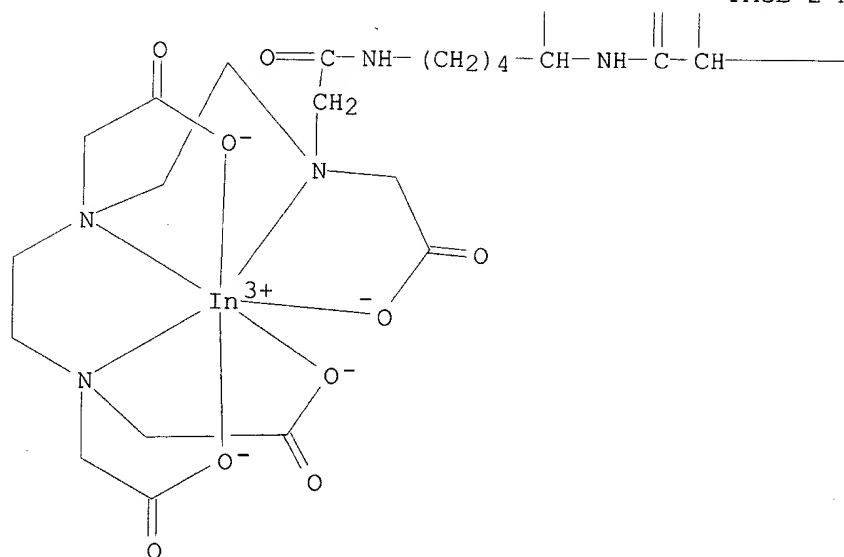
PAGE 1-A



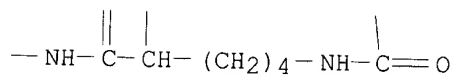
PAGE 1-B



PAGE 2-A



PAGE 2-B

● 2 H⁺

- 1 REFERENCES IN FILE CA (1967 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

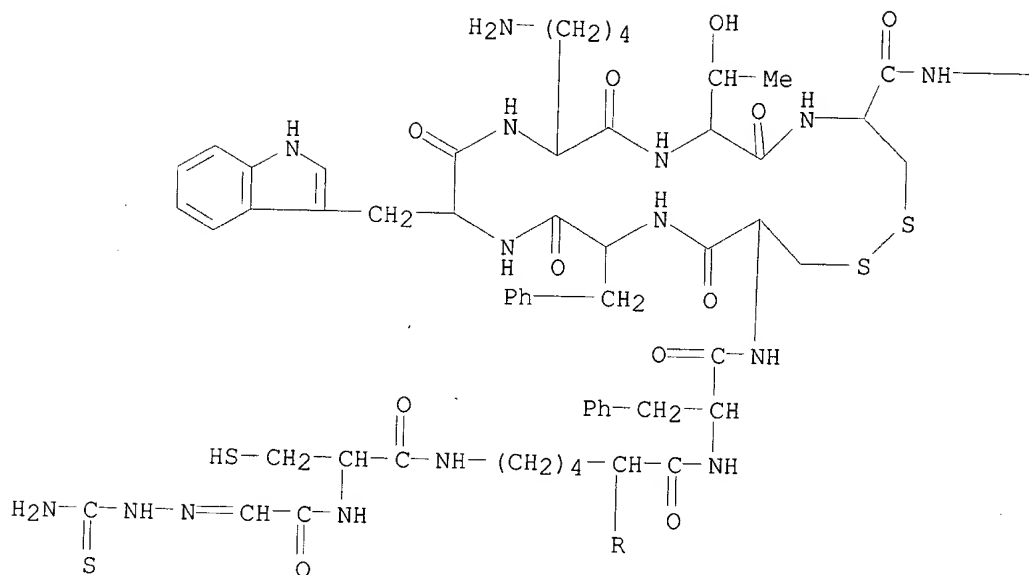
REFERENCE 1: 134:82801

L3 ANSWER 3 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 264146-51-2 REGISTRY
 CN L-Cysteinamide, glycyl-L-.alpha.-aspartyl-D-.alpha.-aspartyl-N6-[N-
 [[(aminothioxomethyl)hydrazono]acetyl]-L-cysteiny]-L-lysyl-L-phenylalanyl-
 D-cysteiny-L-phenylalanyl-L-tryptophyl-D-lysyl-L-threonyl-N-[(1R,2R)-2-
 hydroxy-1-(hydroxymethyl)propyl]-, cyclic (6.fwdarw.11)-disulfide (9CI)
 (CA INDEX NAME)

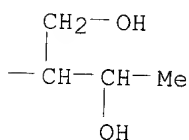
OTHER NAMES:

CN IMP 162
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C71 H99 N19 O20 S4
 SR CA
 LC STN Files: CA, CAPLUS

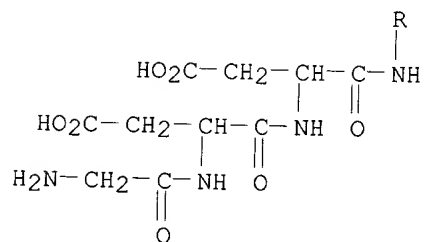
PAGE 1-A



PAGE 1-B



PAGE 2-A



- 1 REFERENCES IN FILE CA (1967 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:284257

L3 ANSWER 4 OF 27 REGISTRY COPYRIGHT 2002 ACS

RN 264146-50-1 REGISTRY

CN D-Lysinamide, N-(hydrazinoacetyl)-D-.alpha.-aspartyl-N6-[N-

[[(aminothioxomethyl)hydrazono]acetyl]-L-cysteinyl]-D-lysyl-D-.alpha.-
 aspartyl-D-lysyl-N6-[N-[[(aminothioxomethyl)hydrazono]acetyl]-L-cysteinyl]-
 D-lysyl-D-.alpha.-aspartyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN IMP 171

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C50 H86 N22 O18 S4

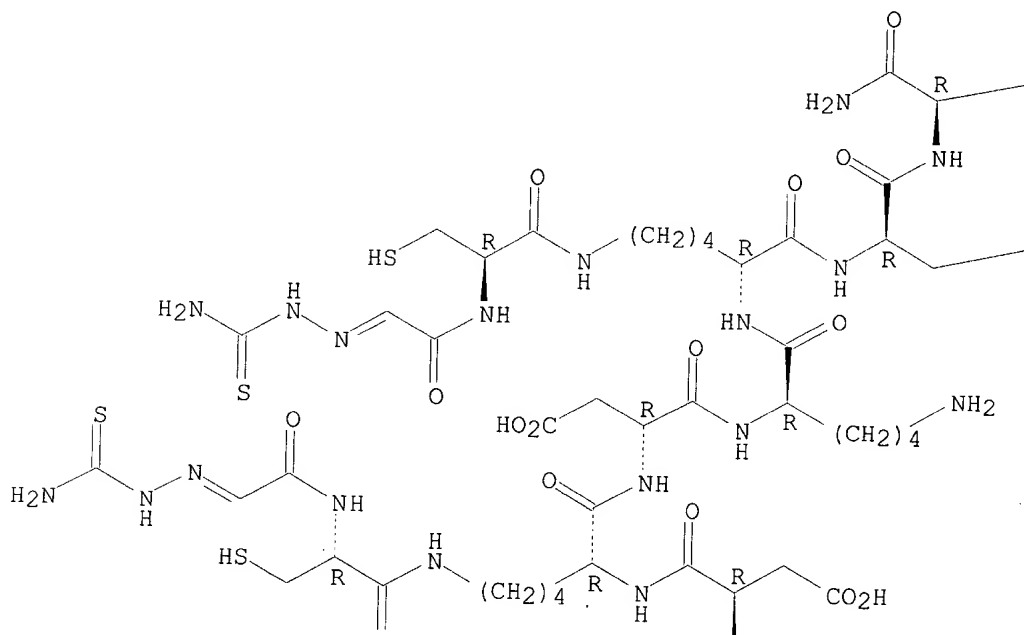
SR CA

LC STN Files: CA, CAPLUS

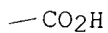
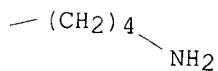
Absolute stereochemistry.

Double bond geometry unknown.

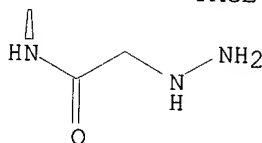
PAGE 1-A



PAGE 1-B



PAGE 2-A

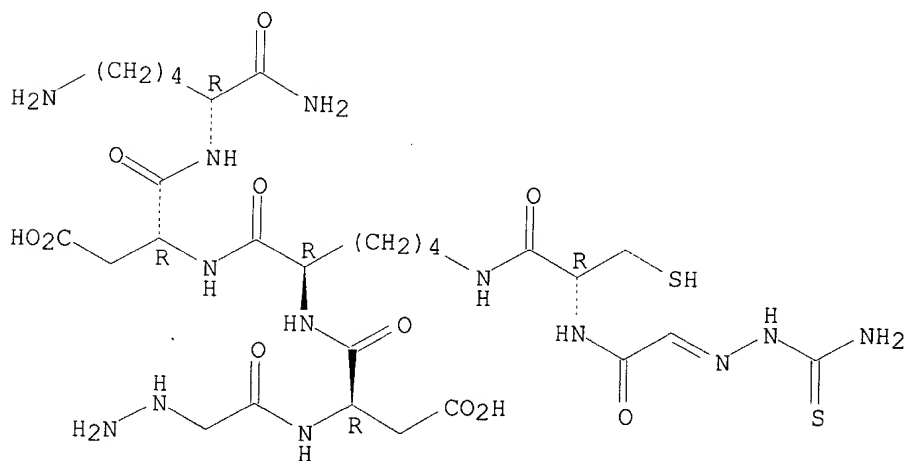


- 1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:284257

L3 ANSWER 5 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 224446-85-9 REGISTRY
 CN D-Lysinamide, N-(hydrazinoacetyl)-D-.alpha.-aspartyl-N6-[N-
 [[(aminothioxomethyl)hydrazono]acetyl]-L-cysteinyl]-D-lysyl-D-.alpha.-
 aspartyl- (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN IMP 155
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C28 H49 N13 O11 S2
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
 Double bond geometry unknown.



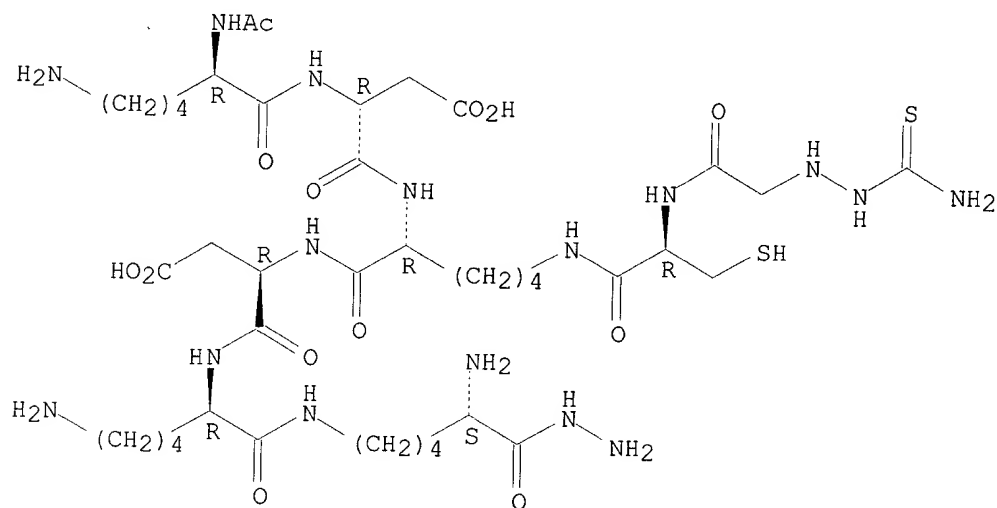
- 2 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:284257

REFERENCE 2: 130:336967

L3 ANSWER 6 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 224446-83-7 REGISTRY
 CN L-Lysine, N6-[N2-acetyl-D-lysyl-D-.alpha.-aspartyl-N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-D-lysyl-D-.alpha.-aspartyl-D-lysyl]-, hydrazide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C40 H74 N16 O13 S2
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

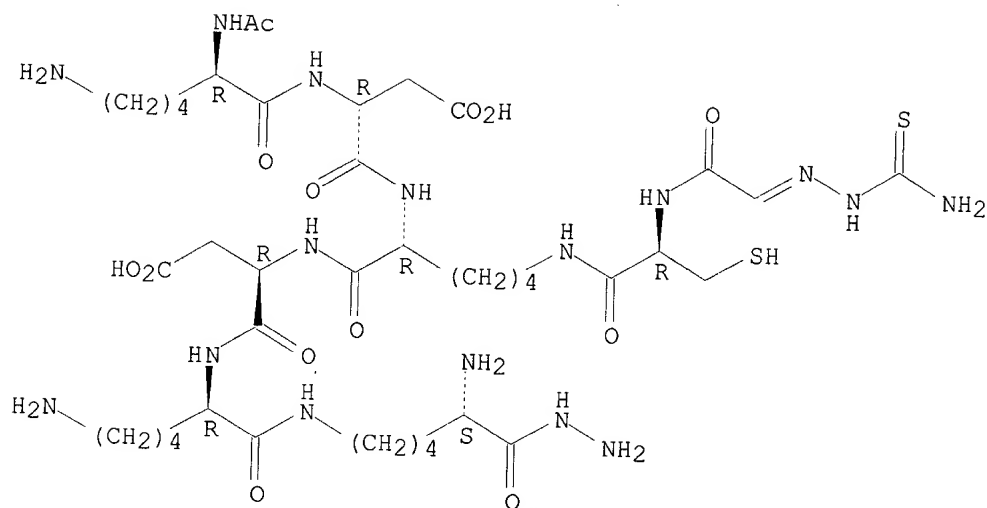


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:336967

L3 ANSWER 7 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 224446-81-5 REGISTRY
 CN L-Lysine, N6-[N2-acetyl-D-lysyl-D-.alpha.-aspartyl-N6-[N-[[2-(aminothioxomethyl)hydrazono]acetyl]-L-cysteinyl]-D-lysyl-D-.alpha.-aspartyl-D-lysyl]-, hydrazide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C40 H72 N16 O13 S2
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
 Double bond geometry unknown.

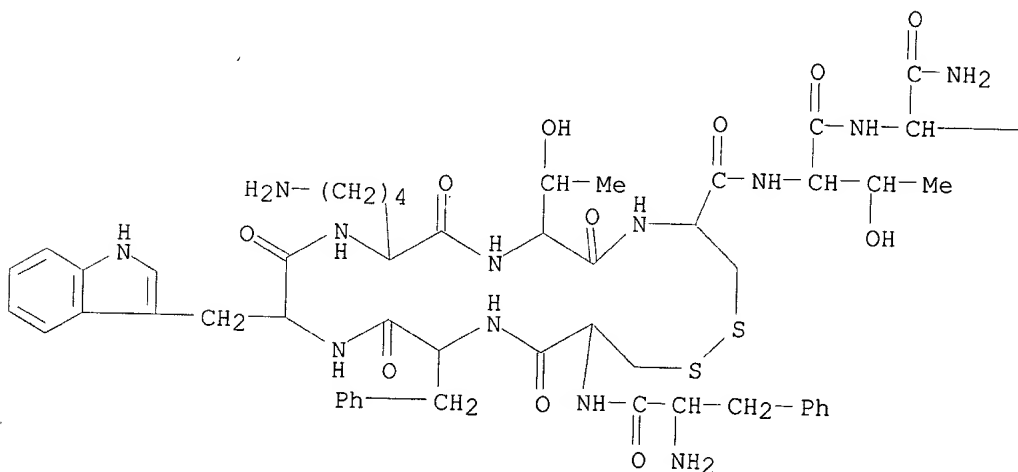


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

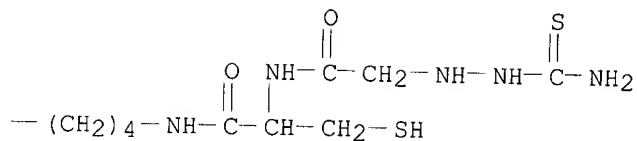
REFERENCE 1: 130:336967

L3 ANSWER 8 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-84-9 REGISTRY
 CN L-Lysinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-
 lysyl-L-threonyl-L-cysteinyl-L-threonyl-N6-[N-[[2-
 (aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-, cyclic
 (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C61 H87 N17 O13 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B

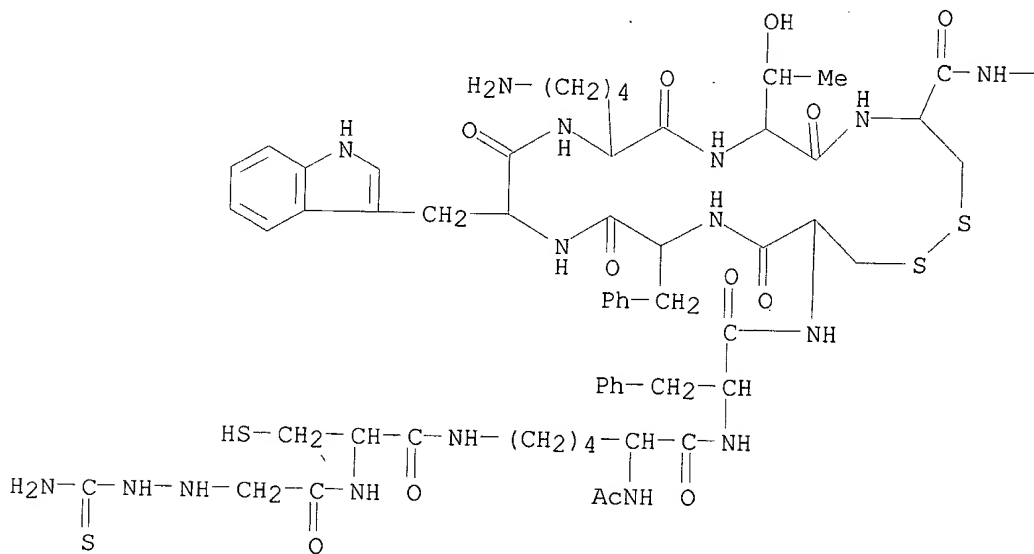


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

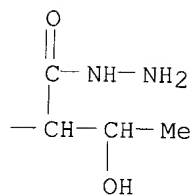
REFERENCE 1: 128:154385

L3 ANSWER 9 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-81-6 REGISTRY
 CN L-Threonine, N2-acetyl-N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, hydrazide, cyclic (3.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C63 H90 N18 O14 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B

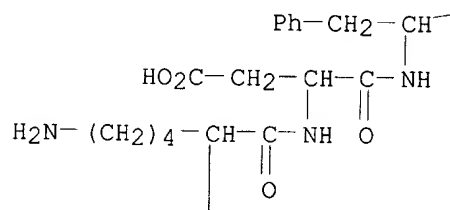
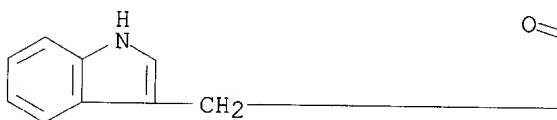


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

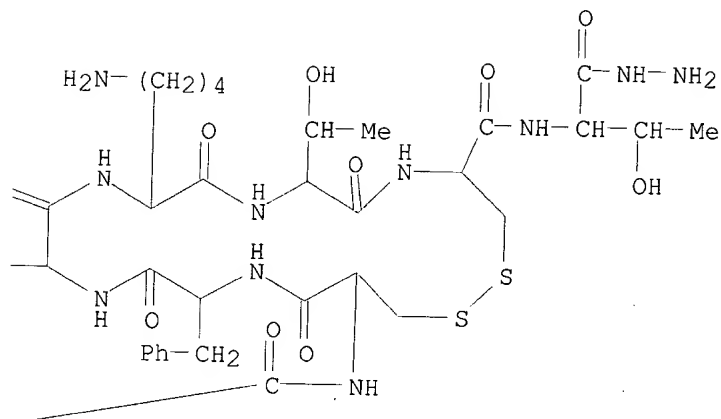
REFERENCE 1: 128:154385

L3 ANSWER 10 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-80-5 REGISTRY
 CN L-Threonine, N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteiny]-L-lysyl-L-lysyl-L-.alpha.-aspartyl-D-phenylalanyl-L-cysteiny-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteiny-, 11-hydrazide, cyclic (5.fwdarw.10)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C71 H105 N21 O17 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

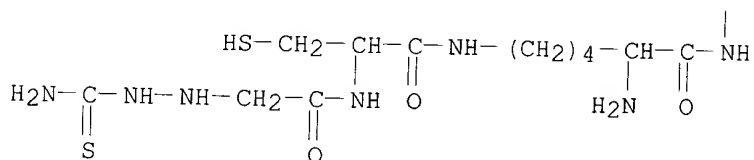
PAGE 1-A



PAGE 1-B



PAGE 2-A



1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:154385

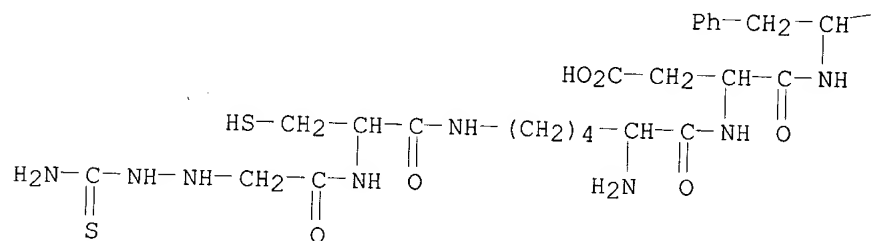
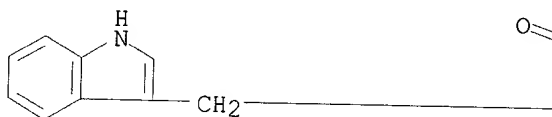
L3 ANSWER 11 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-79-2 REGISTRY
 CN L-.alpha.-Asparagine, N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-L-.alpha.-aspartyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, cyclic (4.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C65 H90 N18 O17 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

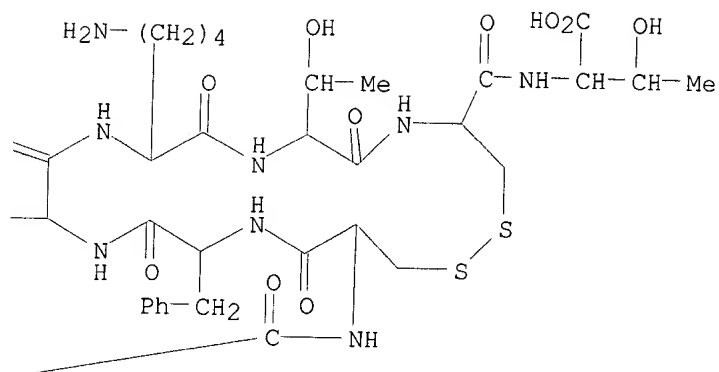
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:154385

L3 ANSWER 12 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-78-1 REGISTRY
 CN L-Threonine, N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteiny]-L-lysyl-L-.alpha.-aspartyl-D-phenylalanyl-L-cysteiny-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteiny-, cyclic (4.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C65 H91 N17 O17 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A





1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

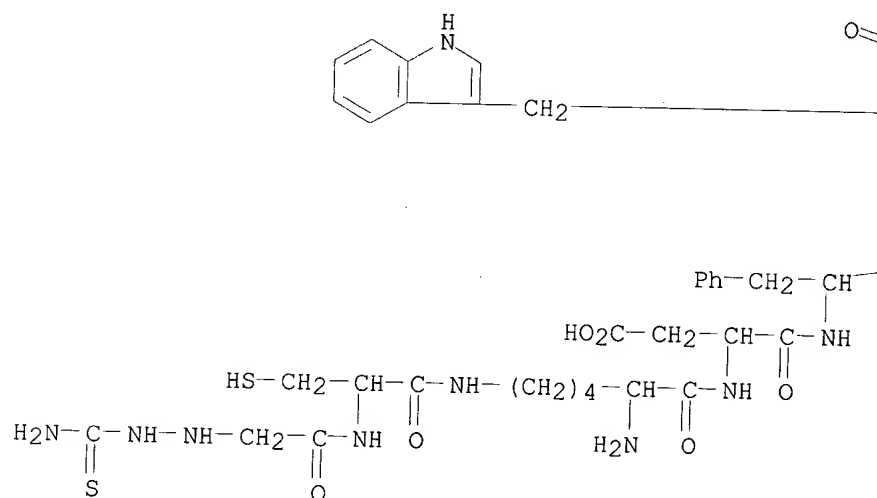
REFERENCE 1: 128:154385

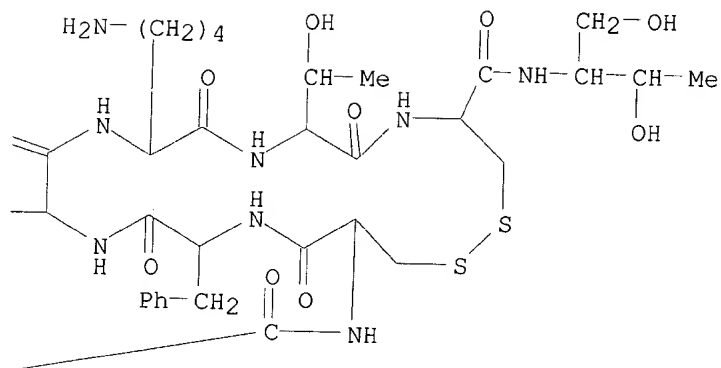
L3 ANSWER 13 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-77-0 REGISTRY
 CN L-Threonine, N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteiny]-L-lysyl-L-.alpha.-aspartyl-L-seryl-D-phenylalanyl-L-cysteiny]-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteiny]-, cyclic (5.fwdarw.10)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C68 H96 N18 O19 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

REFERENCE 1: 128:154385

L3 ANSWER 14 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-76-9 REGISTRY
 CN L-Cysteinamide, N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-L-.alpha.-aspartyl-D-phenylalanyl-L-cysteinyl-D-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[2-hydroxy-1-(hydroxymethyl)propyl]-, cyclic (4.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C65 H93 N17 O16 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A





1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

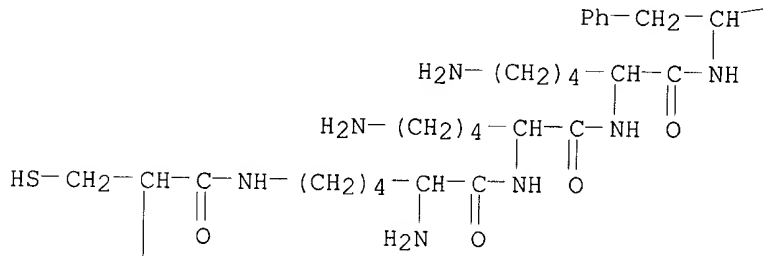
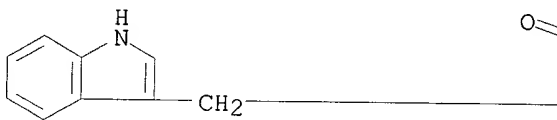
REFERENCE 1: 128:154385

L3 ANSWER 15 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-75-8 REGISTRY
 CN L-Threonine, N2-acetyl-N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-L-lysyl-L-.alpha.-aspartyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, cyclic (5.fwdarw.10)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C71 H103 N19 O18 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

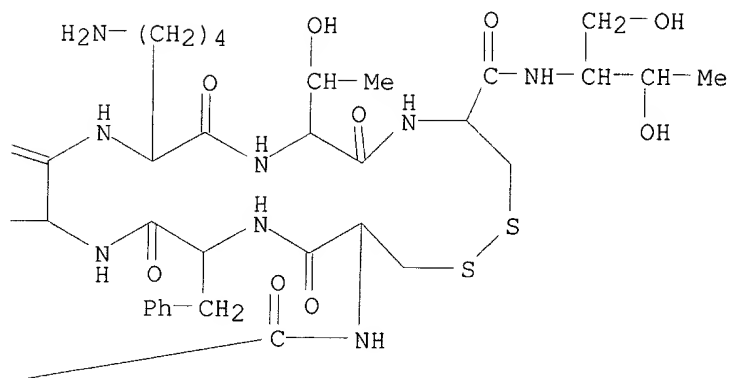
REFERENCE 1: 128:154385

L3 ANSWER 16 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-74-7 REGISTRY
 CN L-Cysteinamide, N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-L-lysyl-L-lysyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[2-hydroxy-1-(hydroxymethyl)propyl]-, cyclic (5.fwdarw.10)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C73 H112 N20 O15 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

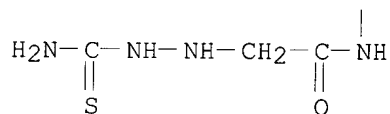
PAGE 1-A



PAGE 1-B



PAGE 2-A



1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:154385

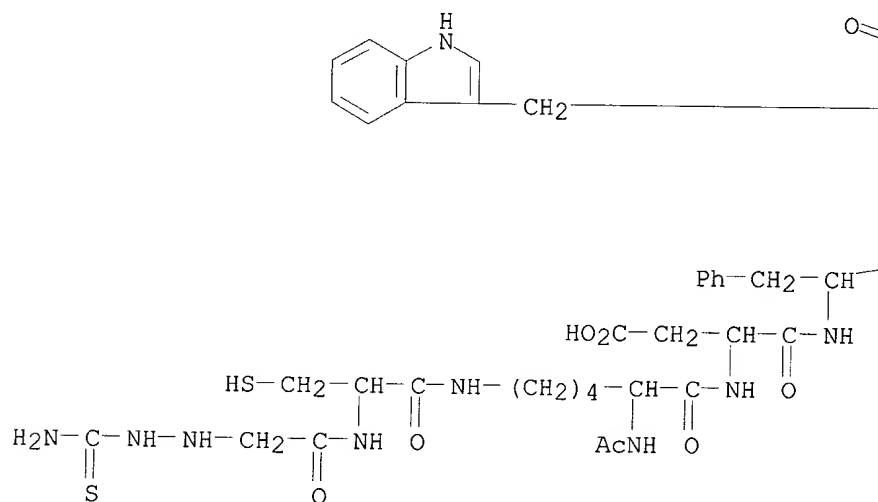
L3 ANSWER 17 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-73-6 REGISTRY
 CN L-Threoninamide, N2-acetyl-N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-L-.alpha.-aspartyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, cyclic (4.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C65 H92 N18 O16 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

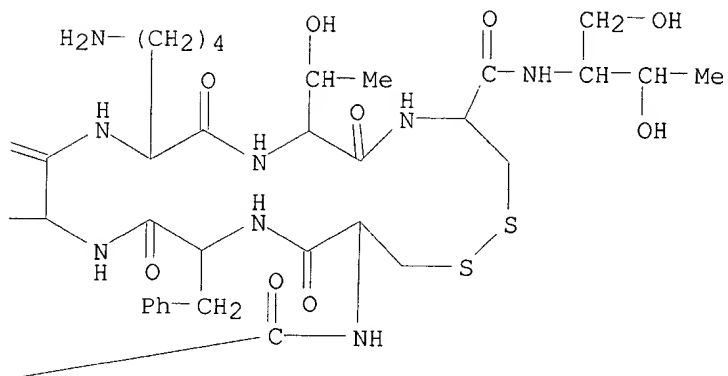
REFERENCE 1: 128:154385

```
L3 ANSWER 18 OF 27  REGISTRY  COPYRIGHT 2002 ACS
RN 202526-71-4  REGISTRY
CN L-Cysteinamide, N2-acetyl-N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-
cysteinyl]-L-lysyl-L-.alpha.-aspartyl-D-phenylalanyl-L-cysteinyl-L-
phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (4.fwdarw.9)-
disulfide (9CI)  (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C67 H95 N17 O17 S4
SR CA
LC STN Files:  CA, CAPLUS, USPATFULL
```

PAGE 1-A



PAGE 1-B

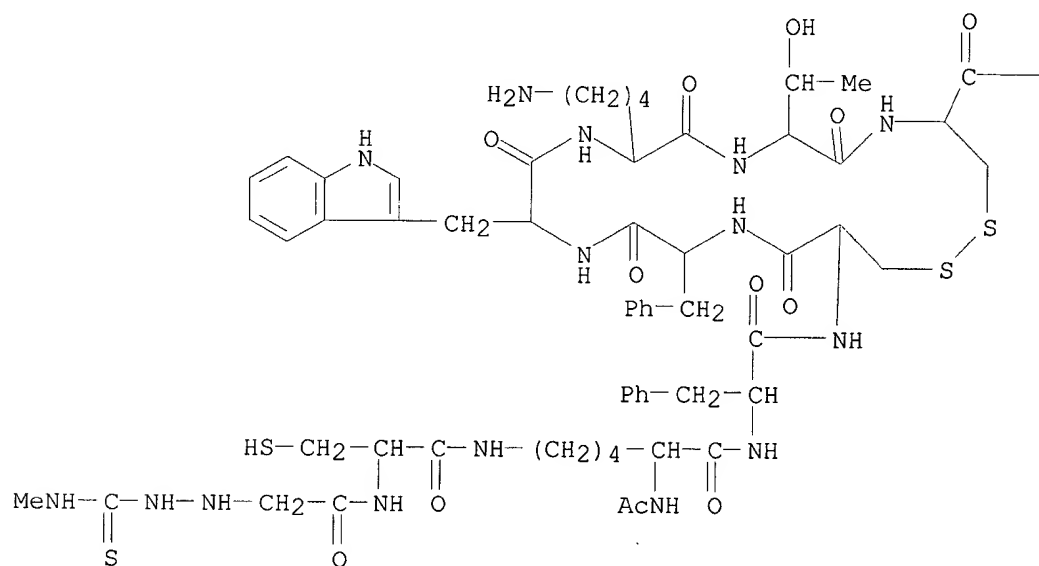


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

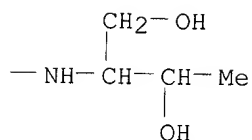
REFERENCE 1: 128:154385

L3 ANSWER 19 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-70-3 REGISTRY
 CN L-Cysteinamide, N2-acetyl-N6-[N-[[2-[(methylamino)thioxomethyl]hydrazino]acetyl]-L-cysteinyl]-L-lysyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[2-hydroxy-1-(hydroxymethyl)propyl]-, cyclic (3.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C64 H92 N16 O14 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B

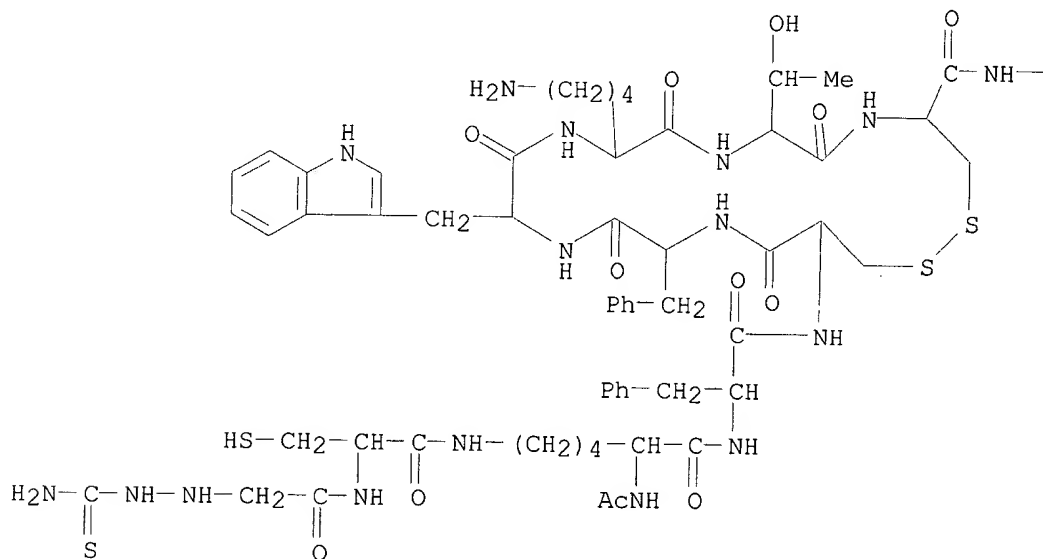


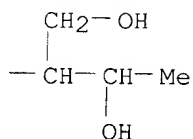
1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:154385

L3 ANSWER 20 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-69-0 REGISTRY
 CN L-Cysteinamide, N2-acetyl-N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[2-hydroxy-1-(hydroxymethyl)propyl]-, cyclic (3.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C63 H90 N16 O14 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A

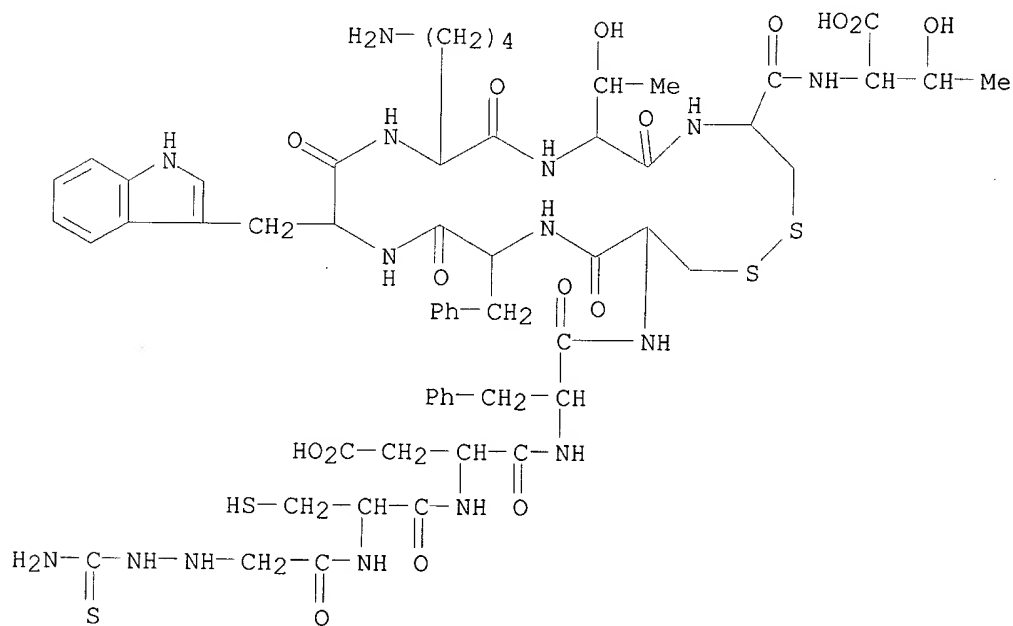




1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:154385

L3 ANSWER 21 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-68-9 REGISTRY
 CN L-Threonine, N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl-L-
 .alpha.-aspartyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-
 lysyl-L-threonyl-L-cysteinyl-, cyclic (4.fwdarw.9)-disulfide (9CI) (CA
 INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C59 H79 N15 O16 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



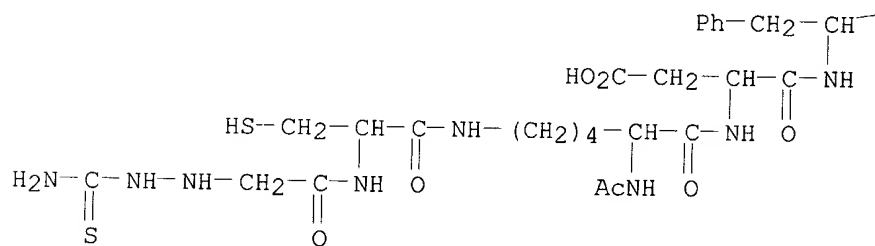
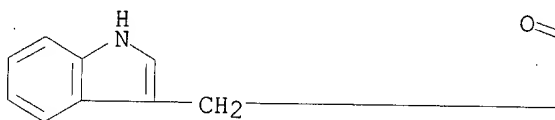
1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:154385

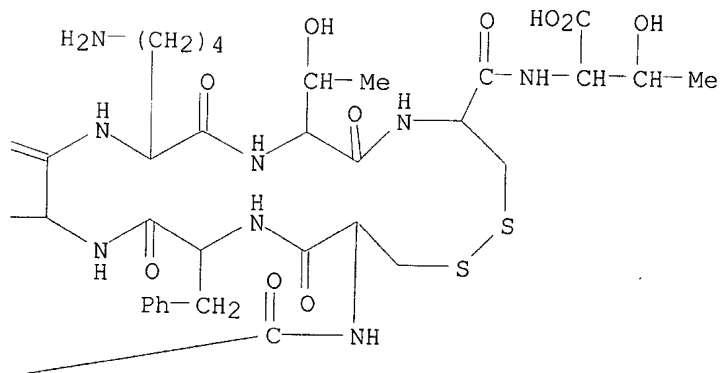
L3 ANSWER 22 OF 27 REGISTRY COPYRIGHT 2002 ACS

RN 202526-67-8 REGISTRY
 CN L-Threonine, N2-acetyl-N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-L-.alpha.-aspartyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, cyclic (4.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C67 H93 N17 O18 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B

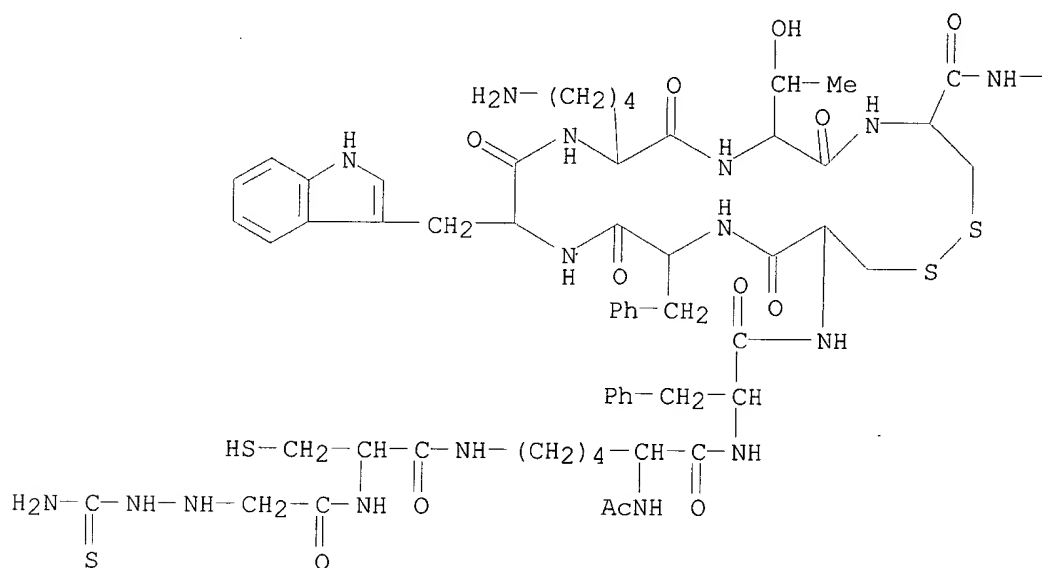


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

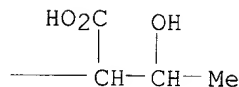
REFERENCE 1: 128:154385

L3 ANSWER 23 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-66-7 REGISTRY
 CN L-Threonine, N2-acetyl-N6-[N-[[2-(aminothioxomethyl)hydrazino]acetyl]-L-cysteinyl]-L-lysyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, cyclic (3.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C63 H88 N16 O15 S4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

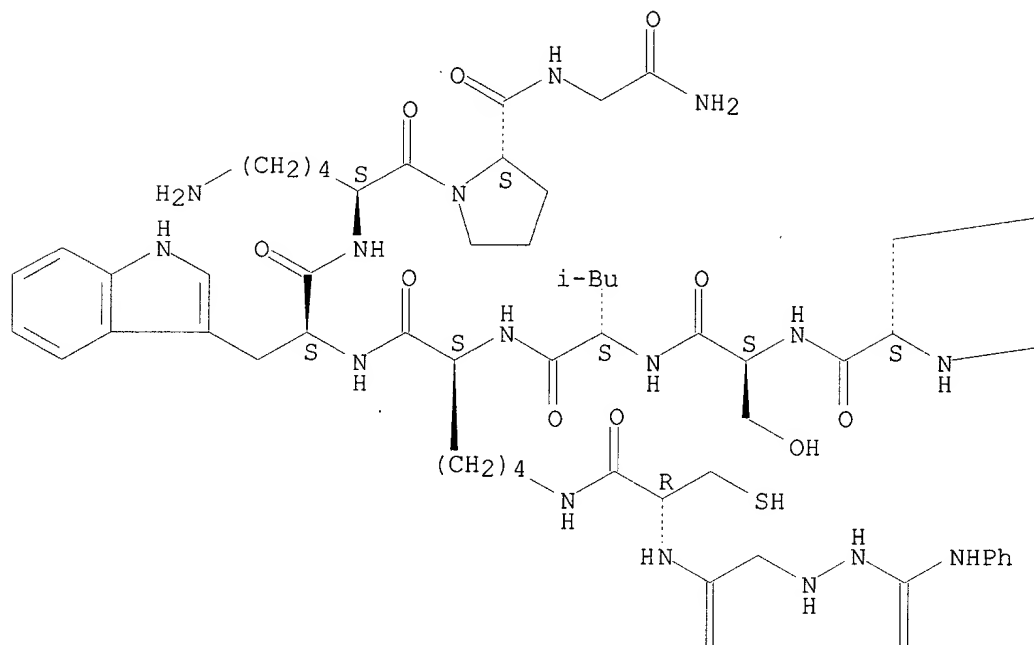
REFERENCE 1: 128:154385

L3 ANSWER 24 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 202526-64-5 REGISTRY
 CN Luteinizing hormone-releasing factor I (Petromyzon marinus), 6-[N6-[N-[[2-[(phenylamino)thioxomethyl]hydrazino]acetyl]-L-cysteinyl]-L-lysine]- (9CI) (CA INDEX NAME)

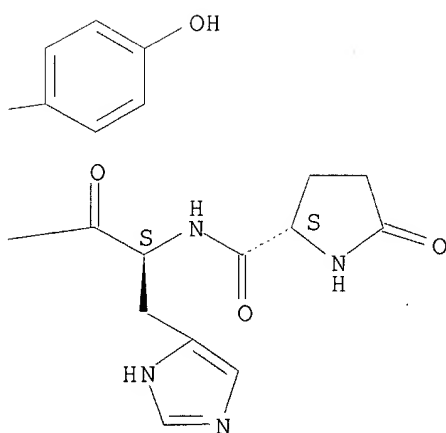
FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C71 H98 N20 O15 S2
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 2-A

||
O||
S

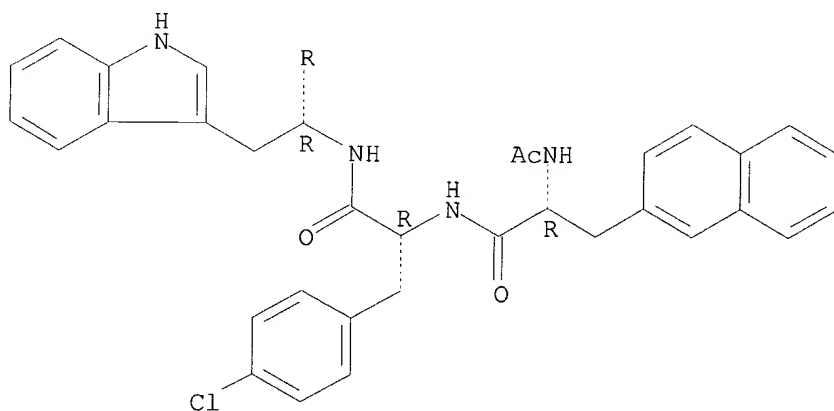
1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:154385

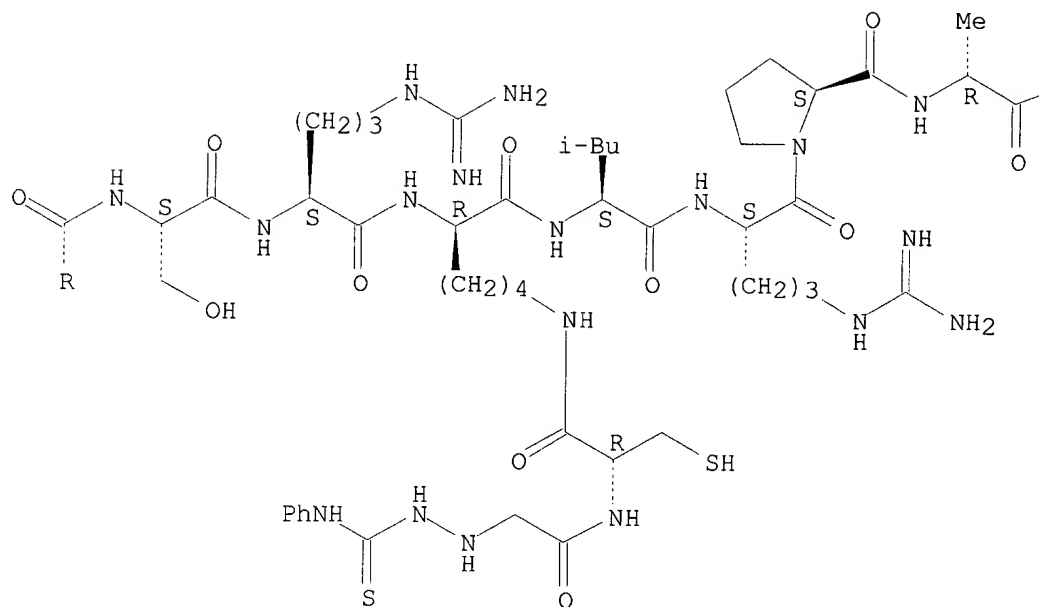
L3 ANSWER 25 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 186350-76-5 REGISTRY
 CN D-Alaninamide, N-acetyl-3-(2-naphthalenyl)-D-alanyl-4-chloro-D-phenylalanyl-D-tryptophyl-L-seryl-L-arginyl-N6-[N-[[2-[(phenylamino)thioxomethyl]hydrazino]acetyl]-L-cysteinyl]-D-lysyl-L-leucyl-L-arginyl-L-prolyl- (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C82 H112 Cl N23 O14 S2
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

NH2

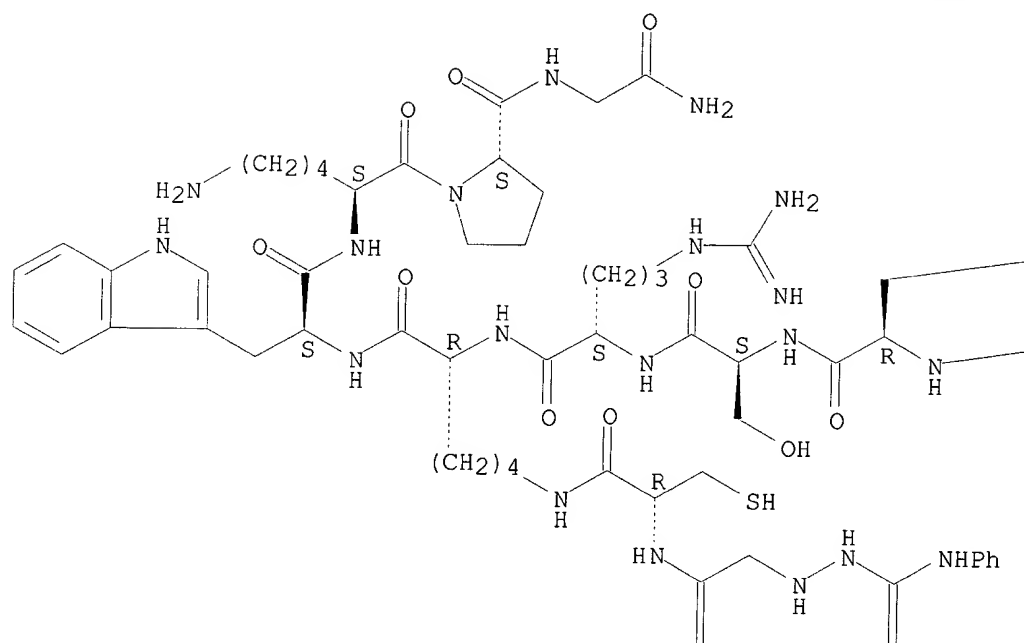
1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:131780

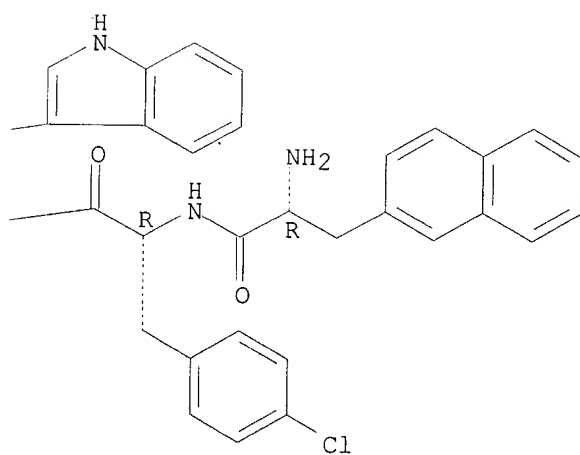
L3 ANSWER 26 OF 27 REGISTRY COPYRIGHT 2002 ACS
 RN 186350-70-9 REGISTRY
 CN Glycinamide, 3-(2-naphthalenyl)-D-alanyl-4-chloro-D-phenylalanyl-D-tryptophyl-L-seryl-L-arginyl-N6-[N-[[2-[(phenylamino)thioxomethyl]hydrazino]acetyl]-L-cysteinyl]-D-lysyl-L-tryptophyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C84 H107 Cl N22 O13 S2
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 2-A

S

2 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

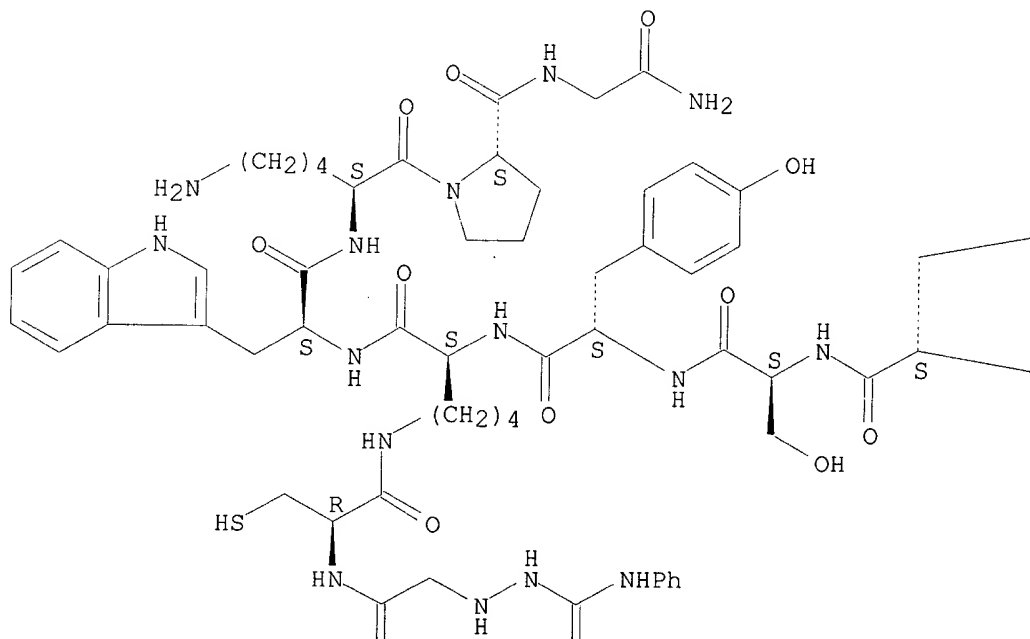
REFERENCE 1: 128:154385

REFERENCE 2: 126:131780

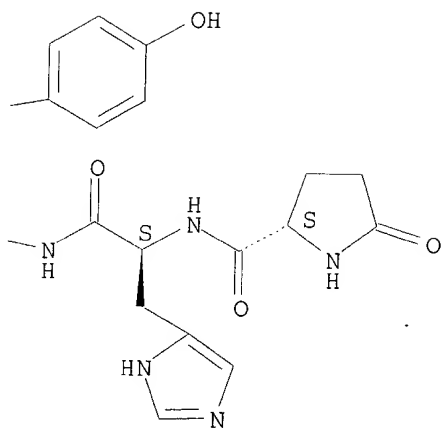
```
L3 ANSWER 27 OF 27  REGISTRY  COPYRIGHT 2002 ACS
RN 186350-66-3  REGISTRY
CN Glycinamide, 5-oxo-L-prolyl-L-histidyl-L-tyrosyl-L-seryl-L-tyrosyl-N6-[N-
  [[2-[(phenylamino)thioxomethyl]hydrazino]acetyl]-L-cysteinyl]-L-lysyl-L-
  tryptophyl-L-lysyl-L-prolyl- (9CI)  (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C74 H96 N20 O16 S2
SR CA
LC STN Files:  CA, CAPLUS, USPATFULL
```

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 2-A



- 1 REFERENCES IN FILE CA (1967 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:131780